

## AMENDMENTS TO THE CLAIMS

1. (Original) An integrated circuit, comprising:  
a sensor operable to detect performance variations of an individual circuit in said integrated circuit, said performance variation being related to aging of said integrated circuit; and  
a compensation circuit operable to change the operating characteristics of said individual circuit to compensate for said performance variation in accordance with an aging-versus time performance curve.

2. (Original) The integrated circuit of claim 1, wherein the individual circuit comprises a phase-locked loop.

3. (Currently Amended) ~~The integrated circuit of claim 2,~~ An integrated circuit, comprising:  
a sensor operable to detect performance variations of an individual circuit in said integrated circuit, wherein the individual circuit comprises a phase-locked loop, and wherein said performance variation is related to aging of said integrated circuit; and  
a compensation circuit operable to change the operating characteristics of said individual circuit to compensate for said performance variation in accordance with an aging-versus time performance curve, wherein the compensation circuit comprises a charge pump having multiple legs that can be selectively enabled to change the performance characteristics of said phase-locked loop.

4. (Currently Amended) The integrated circuit of claim 2 ~~3~~, wherein said compensation circuit comprises a power supply controlled by digital control words to selectively change the operating characteristics of said phase-locked loop.

1           5.       (Currently Amended) The integrated circuit of claim 2 3, comprising a ring  
2 oscillator operable to approximate the effects of NBTI and to generate a compensation  
3 signal corresponding thereto.

1           6.       (Original)     The integrated circuit of claim 5, wherein said compensation  
2 signal is used to generate digital control words to control operation of a power supply.

1           7.       (Original)     The integrated circuit of claim 6, wherein said power supply  
2 is operable to control operation of a voltage controlled oscillator in said phase-locked loop.

1           8.       (Currently Amended) The integrated circuit of claim ~~4~~ 3, wherein said  
2 individual circuit is a delay-locked loop.

1           9.       (Original)     The integrated circuit of claim 8, wherein the compensation  
2 circuit comprises:  
3           a dummy delay line operable to generate a dummy delay line clock signal;  
4           a reference source operable to generate a reference clock signal; and  
5           a comparator operable to compare the dummy delay line clock signal and the  
6           reference clock signal and to generate a control signal therefrom.

1           10.      (Original)     The integrated circuit of claim 9, further comprising a power  
2 supply controller operable to control operation of the delay line of said delay-locked loop in  
3 response to said control signal.

1           11.      (Original)     The integrated circuit of claim 10, wherein said power supply  
2 controller controls operation of said delay line by generating a digital power supply control  
3 word (VDD\_DLL).

1           12.    (Original)    A method for controlling operation of an integrated circuit,  
2 comprising:

3           detecting performance variations of an individual circuit in said integrated circuit,  
4                 said performance variation being related to aging of said integrated circuit;  
5                 and  
6           generating a compensation signal to change the operating characteristics of said  
7                 individual circuit to compensate for said performance variation in  
8                 accordance with an aging-versus time performance curve.

1           13.    (Original)    The method of claim 12, wherein the individual circuit  
2 comprises a phase-locked loop.

1           14.    (Currently Amended) ~~The method of claim 13;~~ A method for controlling  
2 operation of an integrated circuit comprising:  
3           detecting performance variations of an individual circuit in said integrated circuit,  
4                 wherein the individual circuit comprises a phase-locked loop and wherein  
5                 said performance variation is related to aging of said integrated circuit; and  
6           generating a compensation signal to change the operating characteristics of said  
7                 individual circuit to compensate for said performance variation in  
8                 accordance with an aging-versus time performance curve, wherein said  
9           compensation signal is generated by a charge pump having multiple legs that  
10           can be selectively enabled to change the performance characteristics of said  
11           phase-locked loop.

1           15.    (Currently Amended) The method of claim ~~13~~ 14, wherein compensation  
2 signal is generated by a power supply controlled by digital control words to selectively  
3 change the operating characteristics of said phase-locked loop.

1           16.    (Currently Amended) The method of claim ~~13~~ 14, wherein said  
2 compensation signal is generated by a ring oscillator operable to approximate the effects of  
3 NBTI and to generate a compensation signal corresponding thereto.

1            17.    (Original)    The method of claim 16, wherein said compensation signal is  
2            used to generate digital control words to control operation of a power supply.

1            18.    (Original)    The method of claim 17, wherein said power supply is  
2            operable to control operation of a voltage controlled oscillator in said phase-locked loop.

1            19.    (Currently Amended ) The method of claim ~~12~~ 14, wherein said individual  
2            circuit is a delay-locked loop.

1            20.    (Original)    The method of claim 19, wherein the compensation circuit  
2            comprises:  
3            a dummy delay line operable to generate a dummy delay line clock signal;  
4            a reference source operable to generate a reference clock signal; and  
5            a comparator operable to compare the dummy delay line clock signal and the  
6            reference clock signal and to generate a control signal therefrom.